

1
TACHYCARDIA With Pulses

- 2**
- Assess and support ABCs as needed
 - Give **oxygen**
 - Monitor ECG (identify rhythm), blood pressure, oximetry
 - Identify and treat reversible causes

3
Is patient stable?
Unstable signs include altered Mental status, ongoing chest pain hypotension or other signs of shock
Note: rate-related symptoms Uncommon if heart rate <150/min

- Perform immediate Synchronized cardioversion**
- Establish IV access and give sedation if patient is conscious; do not delay cardioversion
 - Consider expert consultation
 - If pulseless arrest develops, see Pulseless Arrest Algorithm

5

- Establish IV access
- Obtain 12-lead ECG (when available) or rhythm strip
- Is QRS narrow (<0.12 sec)?**

Stable

Unstable

Wide (≥0.12 sec)

6
Narrow
NARROW QRS*:
Is Rhythm Regular?

12
WIDE QRS*:
Is Rhythm Regular?
Expert consultation advised

Regular

Irregular

- 7**
- Attempt vagal maneuvers
 - Give **adenosine** 6 mg rapid IV push. If no conversion, give 12 mg rapid IV push; may repeat 12 mg dose once

11
Irregular Narrow-Complex Tachycardia
Probable **atrial fibrillation** or possible **atrial flutter** or **MAT** (multifocal atrial tachycardia)
• Consider expert consultation
• Control rate (eg, **diltiazem**, **β-blockers**; use β-blockers with caution in pulmonary disease or CHF)

13
If Ventricular Tachycardia or Uncertain rhythm
• **Amiodarone** 150 mg IV over 10 min Repeat as needed to maximum dose of 2.2 g/24 hours
• Prepare for elective **synchronized cardioversion**

If SVT with aberrancy
• Give **adenosine** (go to Box 7)

14
If Atrial Fibrillation with Aberrancy
• See Irregular Narrow-Complex Tachycardia (Box 11)

If pre-excited atrial fibrillation (AF + WPW)
• Expert consultation advised
• Avoid AV nodal blocking agents (eg, **adenosine**, **digoxin**, **diltiazem**, **verapamil**)
• Consider antiarrhythmics (eg, **amiodarone** 150 mg IV over 10 min)
If recurrent polymorphic VT, seek expert consultation

If torsades de pointes, give **magnesium** (load with 1-2 g over 5-60 min, then infusion)

8
Does rhythm Convert?
Note: Consider expert consultation

Converts

Does Not Convert

9
If rhythm converts, probable reentry SVT (reentry supraventricular tachycardia):
• Observe for recurrence
• Treat recurrence with **adenosine** or longer-acting AV nodal blocking agents (eg, **diltiazem**, **β-blockers**)

10
If rhythm does NOT convert, possible atrial flutter, ectopic atrial tachycardia, or junctional tachycardia:
• Control rate (eg, **diltiazem**, **β-blockers**; use β-blockers with caution in pulmonary disease or CHF)
• Treat underlying cause
• Consider expert consultation

***Note:** If patient becomes unstable, go to Box 4

- During Evaluation**
- Secure, verify airway and vascular access when possible
 - Consider expert consultation
 - Prepare for cardioversion

- Treat contributing factors**
- Hypovolemia
 - Hypoxia
 - Hydrogen ion (acidosis)
 - Hypo- /hyperkalemia
 - Hypoglycemia
 - Hypothermia
 - Toxins
 - Tamponade, cardiac
 - Tension pneumothorax
 - Thrombosis (coronary or pulmonary)
 - Trauma (hypovolemia)